THE CLAIMS:

1.   A method of processing a set of data, the method comprising selecting code words from a prefix code set, the prefix code set defined by a set of parameters that define a number of code words in an initial class and the growth of at least one additional class of code words.

2.   The method of claim 1, wherein one of the parameters defines the number of times a class is repeated before growing.

3.   The method of claim 1, wherein at least one of the parameters defines the growth.

4.   The method of claim 3, wherein the growth is linear.

5.   The method of claim 4, wherein values for the parameters m, w and d are determined, where m defines an initial class size, and where a class repeats w times before increasing by d.

6.   The method of claim 3, wherein the growth is exponential.

7.   The method of claim 6, wherein values for the parameters k, b and w are determined, where k defines and w defines the number of times a class is repeated before k is increased, and b^K defines the class size.

8.   The method of claim 1, wherein a value for at least one of the parameters is determined prior to encoding.

9.   The method of claim 1, further comprising defining the number of code words in the initial class and the growth prior to selecting the code words.

10.   The method of claim 9, wherein the growth is a function of reliability of defining the number of code words in the initial class.

11.   The method of claim 1, wherein a core set of code words are selected from a lookup table, and wherein a code word not found in the lookup table is selected by computing a new class and assigning a code word from the new class, the new class grown according to the parameters.

12.   The method of claim 1, wherein the code words are selected to encode the data.

13.   The method of claim 1, wherein the code words are selected to decode the data.

14.   Apparatus comprising a processor for performing the method of claim 1.

15.   An article for a computer, the article comprising computer memory encoded with a program that, when executed, causes the computer to perform the method of claim 1.

16.   An article comprising computer memory storing data encoded according to claim 1.

17.   A system comprising:
a source of non-stationary data; and
a machine for transforming the data, and coding the transformed data, the coding including selecting the code words according to the method of claim 1.

18.   The system of claim 17, wherein the source is a source of video data.

19.   The system of claim 18, wherein the machine includes table lookup for coding the transformed data.

20.   The system of claim 18, wherein the coding is performed in a single pass.

21.   A system for coding data words, the system comprising an encoder for accessing values for a set of parameters that define a number of code words in an initial class of a prefix code and the growth of at least one additional class of code words in the prefix code.

22.   Apparatus for processing a data symbol, the apparatus comprising:

a lookup table comprising a plurality of classes of code words, the classes defined by a set of parameters that define a number of code words in an initial class and the growth of at least one additional class of code words; and

a processor for looking up a code word in the lookup table, the code word corresponding to the data symbol.

23.   The apparatus of claim 22, wherein the processor computes a new class of code words if the data symbol does not have an entry in the look up table, and assigns a code word in the new class to the data symbol, the new class grown according to the parameters.

24.   The apparatus of claim 22, wherein one of the parameters defines the number of times a class is repeated before growing.

25.   The apparatus of claim 22, wherein the growth is linear.

26.   The apparatus of claim 22, wherein the growth is exponential.

27.   The apparatus of claim 22, wherein the growth is a function of reliability of defining the number of code words in the initial class.

28.   The apparatus of claim 22, wherein the code words are selected to encode the data.

29.   The apparatus of claim 22, wherein the code words are selected to decode the data.

30.   An article for a processor, the article comprising computer memory encoded with a program for instructing the processor to process data with a prefix code that follows a set of parameters, the parameters defining a number of code words in an initial class and growth of at least one additional class of code words in the prefix code.

31.   The article of claim 30, wherein one of the parameters defines the number of times a class is repeated before growing.

32.   The article of claim 30, wherein the growth is linear.

33.   The article of claim 30, wherein the growth is exponential.

34.   The article of claim 30, wherein the growth is a function of reliability of defining the number of code words in the initial class.

35.   The article of claim 30, wherein the code words are selected to encode the data.

36.   The article of claim 30, wherein the code words are selected to decode the data.